Ohio Environmental Protection Agency

Ted Strickland, Governor
Lee Fisher, Lt. Governor
Chris Korleski, Director

Certified Mail

11/8/2010

| | |
|---|---|
| No | TOXIC REVIEW |
| No | PSD |
| No | SYNTHETIC MINOR TO AVOID MAJOR NSR |
| No | CEMS |
| No | MACT/GACT |
| No | NSPS |
| No | NESHAPS |
| No | NETTING |
| No | MAJOR NON-ATTAINMENT |
| No | MODELING SUBMITTED |
| Yes | SYNTHETIC MINOR TO AVOID TITLE V |
| Yes | FEDERALLY ENFORCABLE PTIO (FEPTIO) |

Timothy Collette
HONEYWELL CPG FRAM OPERATIONS
851 JACKSON ST
GREENVILLE, OH 45331

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0819070018
Permit Number: P0106873
Permit Type: Renewal
County: Darke

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

The issuance of this PTI is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of $70.00, made payable to "Ohio Treasurer Kevin Boyce," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, OH 43215

If you have any questions, please contact Regional Air Pollution Control Agency at (937)225-4435 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPC Web page, www.epa.ohio.gov/dapc, by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

Michael W. Ahern

Michael W. Ahern, Manager
Permit Issuance and Data Management Section, DAPC

Cc: RAPCA

Ohio | Environmental Protection Agency

# FINAL

# Division of Air Pollution Control
# Permit-to-Install and Operate
for
HONEYWELL CPG FRAM OPERATIONS

| | |
|---|---|
| Facility ID: | 0819070018 |
| Permit Number: | P0106873 |
| Permit Type: | Renewal |
| Issued: | 11/8/2010 |
| Effective: | 11/8/2010 |
| Expiration: | 5/7/2015 |

Ohio Environmental Protection Agency

**Division of Air Pollution Control**
**Permit-to-Install and Operate**
for
HONEYWELL CPG FRAM OPERATIONS

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# Authorization

Facility ID: 0819070018
Application Number(s): A0040250
Permit Number: P0106873
Permit Description: Renewal FEPTIO for 4 paper curing ovens controlled by a regenerative thermal oxidizer.
Permit Type: Renewal
Permit Fee: $0.00
Issue Date: 11/8/2010
Effective Date: 11/8/2010
Expiration Date: 5/7/2015
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

HONEYWELL CPG FRAM OPERATIONS
851 JACKSON ST
GREENVILLE, OH 45331

of a Permit-to-Install and Operate for the emissions unit(s) identified on the following page.

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Regional Air Pollution Control Agency
117 South Main Street
Dayton, OH 45422-1280
(937)225-4435

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s)) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director

# Authorization (continued)

Permit Number: P0106873
Permit Description: Renewal FEPTIO for 4 paper curing ovens controlled by a regenerative thermal oxidizer.

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

| | |
|---|---|
| **Emissions Unit ID:** | **P047** |
| Company Equipment ID: | #1 Paper Curing Oven - West |
| Superseded Permit Number: | 08-04315 |
| General Permit Category and Type: | Not Applicable |
| **Emissions Unit ID:** | **P048** |
| Company Equipment ID: | #2 Paper Curing Oven - West |
| Superseded Permit Number: | 08-04315 |
| General Permit Category and Type: | Not Applicable |
| **Emissions Unit ID:** | **P049** |
| Company Equipment ID: | #3 Paper Curing Oven - West |
| Superseded Permit Number: | 08-04315 |
| General Permit Category and Type: | Not Applicable |
| **Emissions Unit ID:** | **P050** |
| Company Equipment ID: | #4 Paper Curing Oven - West |
| Superseded Permit Number: | 08-04315 |
| General Permit Category and Type: | Not Applicable |

# A. Standard Terms and Conditions

**1. What does this permit-to-install and operate ("PTIO") allow me to do?**

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

**2. Who is responsible for complying with this permit?**

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.
The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

**3. What records must I keep under this permit?**

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

**4. What are my permit fees and when do I pay them?**

There are two fees associated with permitted air contaminant sources in Ohio:

- PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

  You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

- Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

**5. When does my PTIO expire, and when do I need to submit my renewal application?**

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

**6. What happens to this permit if my project is delayed or I do not install or modify my source?**

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

**7. What reports must I submit under this permit?**

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

**8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?**

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).
The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

**9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?**

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.

**10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?**

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the Regional Air Pollution Control Agency in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed

permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.
If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

**11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?**

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

**12. What happens if one or more emissions units operated under this permit is/are shut down permanently?**

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.
You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting[1] a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.
You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.
Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

**13. Can I transfer this permit to a new owner or operator?**

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

**14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?**

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated

[1] Permittees that use Ohio EPA's "Air Services" can mark the affected emissions unit(s) as "permanently shutdown" in the facility profile along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).

under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

**15. What happens if a portion of this permit is determined to be invalid?**

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.

# B. Facility-Wide Terms and Conditions

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

   a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

      (1) None.

   b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

      (1) None.

# C. Emissions Unit Terms and Conditions

**1. P047, #1 Paper Curing Oven - West**

**Operations, Property and/or Equipment Description:**

600 lbs/hr Paper Curing Oven with Regenerative Thermal Oxidizer

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)b., c)(1), d)(4) and d)(5), e)(1), f)(1)e.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| a. | OAC rule 3745-31-05(A)(3)<br>PTI 08-04315 | Organic Compounds (OC) emissions from this emissions unit shall not exceed 0.78 lb/hr, 0.18 ton/month, and 2.13 tons per year (TPY).<br><br>The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D) and OAC rule 3745-21-07(M)(4). |
| b. | OAC rule 3745-31-05(D)<br>(Synthetic minor to avoid Title V) | The emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112 (b) of Title III of the Clean Air Act, from this facility shall be less than 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs, based on rolling, 12-month summations.<br><br>See c)(1). |
| c. | OAC rule 3745-17-07(A)(1) | Visible particulate emissions (PE) from the stack serving this emissions unit shall |

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | | not exceed 20 percent opacity as a six-minute average, except as provided by rule. |
| d. | OAC rule 3745-21-07(M)(4) | See b)(2)b. |
| e. | OAC rule 3745-21-07(G)(1) effective 6/15/1999 | The requirements specified by this rule are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3).<br><br>See b)(2)c. |

(2) Additional Terms and Conditions

a. The hourly OC emission limitation was established to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.

b. This emissions unit shall be equipped with a control system (i.e., capture and control equipment) that reduces the organic compound emissions by an overall control efficiency of at least eighty-five percent by weight. If the reductions are achieved by incineration, ninety percent or more of the carbon in the organic material being incinerated shall be oxidized to carbon dioxide.

c. On February 18, 2008, OAC rule 3745-21-07 was partially revised; therefore, the 21-07(G)(1) rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07(G)(1) rule provisions still exists as part of the federally-approved SIP for Ohio. The following terms and conditions shall become void after U.S. EPA approves the rule revision: b)(1)e.

d. All of the OC emissions from this emissions unit shall be vented to the thermal oxidizer that shall meet the operational, monitoring, and record keeping requirements of this permit, when the emissions unit is in operation. The thermal oxidizer is a common OC control device for emissions units P047, P048, P049 and P050.

c) Operational Restrictions

(1) The maximum paper usage rate for this emissions unit shall not exceed 273,750 lbs/month or 3,285,000 lbs/year, based on rolling, 12-month summations.

d) Monitoring and/or Recordkeeping Requirements

(1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average combustion temperature within the thermal oxidizer, for any 3-hour block of time when the emissions unit(s) controlled by the thermal oxidizer

is/are in operation, shall not be more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance.

(2) The permittee shall properly install, operate, and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the thermal oxidizer when the emissions unit(s) is/are in operation, including periods of startup and shutdown. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within ± 1 percent of the temperature being measured or ± 5 degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals, with any modifications deemed necessary by the permittee. The permittee shall collect and record the following information each day the emissions unit(s) is/are in operation:

a. all 3-hour blocks of time, when the emissions unit(s) controlled by the thermal oxidizer was/were in operation, during which the average combustion temperature within the thermal oxidizer was more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance; and

b. a log or record of the operating time for the capture (collection) system, thermal oxidizer, monitoring equipment, and the associated emissions unit(s).

These records shall be maintained at the facility for a period of three years.

(3) Whenever the monitored average combustion temperature within the thermal oxidizer deviates from the range or limit established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;

b. the magnitude of the deviation at that time;

c. the date the investigation was conducted;

d. the name(s) of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range/limit specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

a. a description of the corrective action;

b. the date corrective action was completed;

c. the date and time the deviation ended;

d. the total period of time (in minutes) during which there was a deviation;

e. the temperature readings immediately after the corrective action was implemented; and

f. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The temperature range/limit is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted temperature range/limit based upon information obtained during future performance tests that demonstrate compliance with the allowable emission rate(s) for the controlled pollutant(s). In addition, approved revisions to the temperature range/limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

(4) The permittee shall collect and record the following information each month for this emissions unit:

a. The total pounds of paper cured.

b. The total organic compound emission rate, in pounds (see f)(1)b.v. for the calculation methodology).

c. The total formaldehyde emission rate, in pounds (see f)(1)b.i. for the calculation methodology).

d. The total phenol emission rate, in pounds (see f)(1)b.ii. for the calculation methodology).

e. The total methanol emission rate, in pounds (see f)(1)b.iii. for the calculation methodology).

f. The total phenol, formaldehyde, methanol, and total combined HAPs emission rates, in tons.

g. The rolling, 12-month summation of the phenol, formaldehyde, methanol, and total combined HAPs.

h. The rolling, 12-month summation of the pounds of paper cured in this emissions unit.

(5) The permittee shall collect and record the following information each month for the entire facility:

a. The total individual Hazardous Air Pollutant (HAP)* emission rate, in tons per month, for each HAP employed at this facility.

b. The rolling, 12-month summation of the total individual HAP emissions from all emissions units at the facility, in tons.

c. The total combined HAP emission rate, in tons per month, for all of the HAPs employed at this facility.

d. The rolling, 12-month summation of the total combined HAP emissions from all emissions units at the facility, in tons.

*A listing of the HAPs can be found in Section 112 (b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office or local agency contact. This information does not have to be kept on a line-by-line basis.

(6) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

i. each period of time (start time and date, and end time and date) when the average combustion temperature within the thermal oxidizer was outside of the acceptable range;

ii. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the thermal oxidizer;

iii. all exceedances of the rolling, 12-month individual HAP emission limitation;

iv. all exceedances of the rolling, 12-month total combined HAP emission limitation;

v. all exceedances of the maximum monthly paper production rate of 273,750 pounds of paper per month; and

vi. all exceedances of the rolling, 12-month annual paper production rate of 3,285,000 pounds of paper per year.

b. the probable cause of each deviation (excursion);

c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and

d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

(2) The permittee shall identify in the annual permit evaluation report the following information concerning the operations of the thermal oxidizer during the 12-month reporting period for this/these emissions unit(s):

a. each period of time (start time and date, and end time and date) when the average combustion temperature within the thermal oxidizer was outside of the acceptable range;

b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the thermal oxidizer;

c. each incident of deviation described in e)(2)a. or e)(2)b. where a prompt investigation was not conducted;

d. each incident of deviation described in e)(2)a. or e)(2)b. where prompt corrective action, that would bring the emissions unit(s) into compliance and/or the temperature within the thermal oxidizer into compliance with the acceptable range, was determined to be necessary and was not taken; and

e. each incident of deviation described in e)(2)a. or e)(2)b. where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

(3) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d)(6) above:

a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and

b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

(4) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

(1) Compliance with the emission limitation(s) in b)(1) of these terms and conditions shall be determined in accordance with the following method(s):

a. <u>Emission Limitation</u>

The OC emissions from this emissions unit shall not exceed 0.78 lb/hour.

<u>Applicable Compliance Method</u>

Compliance with this emissions limitation shall be based upon the following:

i. Multiply the maximum paper usage of 600 lbs/hr by the emission factor of 1.35 x 10-4 lb formaldehyde/lb paper, as derived from the December, 1999 stack test.

ii. Multiply the maximum paper usage of 600 lbs/hr by the emission factor of 2.865 x 10-4 lb phenol/lb paper, as derived from the December, 1999 stack test.

iii. Multiply the maximum paper usage of 600 lbs/hr by the emission factor of 6.975 x 10-4 lb methanol/lb paper, as derived from the December, 1999 stack test.

iv. Multiply the maximum paper usage of 600 lbs/hr by the emission factor of 1.75 x 10-4 lb isopropanol/lb paper, as derived from the December, 1999 stack test.

v. Sum the products from f)(1)a.i. through f)(1)a.iv. for the total hourly OC emission rate in pounds.

If required, compliance shall be based upon stack testing performed in accordance with USEPA Reference Method 18 or 25.

b. Emission Limitation

The OC emissions from this emissions unit shall not exceed 0.18 tons per month.

Applicable Compliance Method

i. Multiply the paper usage, in lbs/month as determined in d)(4)a. by the emission factor of 1.35 x 10-4 lb formaldehyde/lb paper, as derived from the December, 1999 stack test.

ii. Multiply the paper usage, in lbs/month as determined in d)(4)a. by the emission factor of 2.865 x 10-4 lb phenol/lb paper, as derived from the December, 1999 stack test.

iii. Multiply the paper usage, in lbs/month as determined in d)(4)a. by the emission factor of 6.975 x 10-4 lb methanol/lb paper, as derived from the December, 1999 stack test.

iv. Multiply the paper usage, in lbs/month as determined in d)(4)a. by the emission factor of 1.75 x 10-4 lb isopropanol/lb paper, as derived from the December, 1999 stack test.

v. Sum the products from f)(1)b.i. through f)(1)b.iv., in lbs OC/month, for each month and divide by 2000 lbs/ton.

If required, compliance shall be based upon stack testing performed in accordance with USEPA Reference Method 18 or 25.

c. Emission Limitation

OC emissions from this emissions unit shall not exceed 2.13 TPY.

Applicable Compliance Method

Compliance with this emissions limitation shall be based upon record keeping in d)(4) and shall be the sum of the 12-monthly limits, in lbs, divided by 2000 lbs/ton.

d. Emission Limitation

The maximum paper usage for this emissions unit shall not exceed 3,285,000 lbs/year per year, based upon a rolling, 12-month summation.

Applicable Compliance Method

Compliance shall be based upon the record keeping specified in d)(4).

e. Emission Limitation

The emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112 (b) of Title III of the Clean Air Act, from this facility shall be less than 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs, per rolling, 12-month summation.

Applicable Compliance Method

Compliance shall be based upon the monthly record keeping as specified in d)(5) of this permit.

f. Emission Limitation

Visible particulate emissions from any/the stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method

Compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9.

(2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted within one year of permit issuance.

b. The emission testing shall be conducted to demonstrate compliance with the OC emissions rate and the 90% control efficiency limitation specified in OAC rule 3745-21-07(M)(4).

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Method 18 of 40 CFR Part 60, Appendix A, as well as Method 25 or 25 A of 40 CFR Part 60, Appendix A, as appropriate, and the test method(s) which must be employed to demonstrate compliance with the overall control efficiency limitation for organic compounds.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)

The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in 3745-21-10 or an alternative test protocol approved by the Ohio EPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

e. Not later than 60 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

g) Miscellaneous Requirements

(1) None.

**2. P048, #2 Paper Curing Oven - West**

**Operations, Property and/or Equipment Description:**

550 lbs/hr Paper Curing Oven with Regenerative Thermal Oxidizer

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)b., c)(1), d)(4) and d)(5), e)(1), f)(1)e.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| a. | OAC rule 3745-31-05(A)(3)<br>PTI 08-04315 | Organic Compounds (OC) emissions from this emissions unit shall not exceed 0.71 lb/hr, 0.16 ton/month, and 1.93 tons per year (TPY).<br><br>The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D) and OAC rule 3745-21-07(M)(4). |
| b. | OAC rule 3745-31-05(D)<br>(Synthetic minor to avoid TV) | The emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112 (b) of Title III of the Clean Air Act, from this facility shall be less than 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs, based on rolling, 12-month summations.<br><br>See c)(1). |
| c. | OAC rule 3745-17-07(A)(1) | Visible particulate emissions (PE) from the stack serving this emissions unit shall |

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | | not exceed 20 percent opacity as a six-minute average, except as provided by rule. |
| d. | OAC rule 3745-21-07(M)(4) | See b)(2)b. |
| e. | OAC rule 3745-21-07(G)(1) effective 6/15/1999 | The requirements specified by this rule are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3).<br><br>See b)(2)c. |

(2) Additional Terms and Conditions

a. The hourly OC emission limitation was established to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.

b. This emissions unit shall be equipped with a control system (i.e., capture and control equipment) that reduces the organic compound emissions by an overall control efficiency of at least eighty-five percent by weight. If the reductions are achieved by incineration, ninety percent or more of the carbon in the organic material being incinerated shall be oxidized to carbon dioxide.

c. On February 18, 2008, OAC rule 3745-21-07 was partially revised; therefore, the 21-07(G)(1) rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07(G)(1) rule provisions still exists as part of the federally-approved SIP for Ohio. The following terms and conditions shall become void after U.S. EPA approves the rule revision: b)(1)e.

d. All of the OC emissions from this emissions unit shall be vented to the thermal oxidizer that shall meet the operational, monitoring, and record keeping requirements of this permit, when the emissions unit is in operation. The thermal oxidizer is a common OC control device for emissions units P047, P048, P049 and P050.

c) Operational Restrictions

(1) The maximum paper usage rate for this emissions unit shall not exceed 249,417 lbs/month or 2,993,000 lbs/year, based on rolling, 12-month summations.

d) Monitoring and/or Recordkeeping Requirements

(1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average combustion temperature within the thermal oxidizer, for any 3-hour block of time when the emissions unit(s) controlled by the thermal oxidizer

is/are in operation, shall not be more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance.

(2) The permittee shall properly install, operate, and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the thermal oxidizer when the emissions unit(s) is/are in operation, including periods of startup and shutdown. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within ± 1 percent of the temperature being measured or ± 5 degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals, with any modifications deemed necessary by the permittee. The permittee shall collect and record the following information each day the emissions unit(s) is/are in operation:

a. all 3-hour blocks of time, when the emissions unit(s) controlled by the thermal oxidizer was/were in operation, during which the average combustion temperature within the thermal oxidizer was more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance; and

b. a log or record of the operating time for the capture (collection) system, thermal oxidizer, monitoring equipment, and the associated emissions unit(s).

These records shall be maintained at the facility for a period of three years.

(3) Whenever the monitored average combustion temperature within the thermal oxidizer deviates from the range or limit established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;

b. the magnitude of the deviation at that time;

c. the date the investigation was conducted;

d. the name(s) of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range/limit specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

a. a description of the corrective action;

b. the date corrective action was completed;

c. the date and time the deviation ended;

d. the total period of time (in minutes) during which there was a deviation;

e. the temperature readings immediately after the corrective action was implemented; and

f. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The temperature range/limit is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted temperature range/limit based upon information obtained during future performance tests that demonstrate compliance with the allowable emission rate(s) for the controlled pollutant(s). In addition, approved revisions to the temperature range/limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

(4) The permittee shall collect and record the following information each month for this emissions unit:

a. The total pounds of paper cured.

b. The total organic compound emission rate, in pounds (see f)(1)b.v. for the calculation methodology).

c. The total formaldehyde emission rate, in pounds (see f)(1)b.i. for the calculation methodology).

d. The total phenol emission rate, in pounds (see f)(1)b.ii. for the calculation methodology).

e. The total methanol emission rate, in pounds (see f)(1)b.iii. for the calculation methodology).

f. The total phenol, formaldehyde, methanol, and total combined HAPs emission rates, in tons.

g. The rolling, 12-month summation of the phenol, formaldehyde, methanol, and total combined HAPs.

h. The rolling, 12-month summation of the pounds of paper cured in this emissions unit.

(5) The permittee shall collect and record the following information each month for the entire facility:

a. The total individual Hazardous Air Pollutant (HAP)* emission rate, in tons per month, for each HAP employed at this facility.

b. The rolling, 12-month summation of the total individual HAP emissions from all emissions units at the facility, in tons.

c. The total combined HAP emission rate, in tons per month, for all of the HAPs employed at this facility.

d. The rolling, 12-month summation of the total combined HAP emissions from all emissions units at the facility, in tons.

*A listing of the HAPs can be found in Section 112 (b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office or local agency contact. This information does not have to be kept on a line-by-line basis.

(6) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

i. each period of time (start time and date, and end time and date) when the average combustion temperature within the thermal oxidizer was outside of the acceptable range;

ii. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the thermal oxidizer;

iii. all exceedances of the rolling, 12-month individual HAP emission limitation;

iv. all exceedances of the rolling, 12-month total combined HAP emission limitation;

v. all exceedances of the maximum monthly paper production rate of 249,417 pounds of paper per month; and

vi. all exceedances of the rolling, 12-month annual paper production rate of 2,993,000 pounds of paper per year.

b. the probable cause of each deviation (excursion);

c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and

d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

(2) The permittee shall identify in the annual permit evaluation report the following information concerning the operations of the thermal oxidizer during the 12-month reporting period for this/these emissions unit(s):

a. each period of time (start time and date, and end time and date) when the average combustion temperature within the thermal oxidizer was outside of the acceptable range;

b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the thermal oxidizer;

c. each incident of deviation described in e)(2)a. or e)(2)b. (above) where a prompt investigation was not conducted;

d. each incident of deviation described in e)(2)a. or e)(2)b. where prompt corrective action, that would bring the emissions unit(s) into compliance and/or the temperature within the thermal oxidizer into compliance with the acceptable range, was determined to be necessary and was not taken; and

e. each incident of deviation described in e)(2)a. or e)(2)b. where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

(3) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d)(6) above:

a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and

b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

(4) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

(1) Compliance with the emission limitation(s) in b)(1) of these terms and conditions shall be determined in accordance with the following method(s):

a. <u>Emission Limitation</u>

The OC emissions from this emissions unit shall not exceed 0.71 lb/hour.

<u>Applicable Compliance Method</u>

Compliance with this emissions limitation shall be based upon the following:

i. Multiply the maximum paper usage of 550 lbs/hr by the emission factor of 1.35 x 10-4 lb formaldehyde/lb paper, as derived from the December, 1999 stack test.

ii. Multiply the maximum paper usage of 550 lbs/hr by the emission factor of 2.865 x 10-4 lb phenol/lb paper, as derived from the December, 1999 stack test.

iii. Multiply the maximum paper usage of 550 lbs/hr by the emission factor of 6.975 x 10-4 lb methanol/lb paper, as derived from the December, 1999 stack test.

iv. Multiply the maximum paper usage of 550 lbs/hr by the emission factor of 1.75 x 10-4 lb isopropanol/lb paper, as derived from the December, 1999 stack test.

v. Sum the products from i. through iv. for the total hourly OC emission rate in pounds.

If required, compliance shall be based upon stack testing performed in accordance with USEPA Reference Method 18 or 25.

b. Emission Limitation

The OC emissions from this emissions unit shall not exceed 0.16 tons per month.

Applicable Compliance Method

i. Multiply the paper usage, in lbs/month as determined in d)(4)a. by the emission factor of 1.35 x 10-4 lb formaldehyde/lb paper, as derived from the December, 1999 stack test.

ii. Multiply the paper usage, in lbs/month as determined in d)(4)a. by the emission factor of 2.865 x 10-4 lb phenol/lb paper, as derived from the December, 1999 stack test.

iii. Multiply the paper usage, in lbs/month as determined in d)(4)a. by the emission factor of 6.975 x 10-4 lb methanol/lb paper, as derived from the December, 1999 stack test.

iv. Multiply the paper usage, in lbs/month as determined in d)(4)a. by the emission factor of 1.75 x 10-4 lb isopropanol/lb paper, as derived from the December, 1999 stack test.

v. Sum the products from f)(1)b.i. through f)(1)b.iv., in lbs OC/month, for each month and divide by 2000 lbs/ton.

c. Emission Limitation

OC emissions from this emissions unit shall not exceed 1.93 TPY.

Applicable Compliance Method

Compliance with this emissions limitation shall be based upon record keeping in d)(4) and shall be the sum of the 12-monthly limits, in lbs, divided by 2000 lbs/ton.

d. Emission Limitation

The maximum paper usage for this emissions unit shall not exceed 2,993,000 lbs/year per year, based upon a rolling, 12-month summation.

Applicable Compliance Method

Compliance shall be based upon the record keeping specified in d)(4).

e. Emission Limitation

The emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112 (b) of Title III of the Clean Air Act, from this facility shall be less than 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs, per rolling, 12-month summation.

Applicable Compliance Method

Compliance shall be based upon the monthly record keeping as specified in d)(5) of this permit.

f. Emission Limitation

Visible particulate emissions from any/the stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method

Compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9.

(2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted within one year of permit issuance.

b. The emission testing shall be conducted to demonstrate compliance with the OC emissions rate and the 90% control efficiency limitation specified in OAC rule 3745-21-07(M)(4).

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Method 18 of 40 CFR Part 60, Appendix A, as well as Method 25 or 25 A of 40 CFR Part 60, Appendix A, as appropriate, and the test method(s) which must be employed to demonstrate compliance with the overall control efficiency limitation for organic compounds.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)

The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in 3745-21-10 or an alternative test protocol approved by the Ohio EPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

e. Not later than 60 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

g) Miscellaneous Requirements

(1) None.

**3. P049, #3 Paper Curing Oven - West**

**Operations, Property and/or Equipment Description:**

500 lbs/hr Paper Curing Oven with Regenerative Thermal Oxidizer

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)b., c)(1), d)(4) and d)(5), e)(1), f)(1)e.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| a. | OAC rule 3745-31-05(A)(3)<br>PTI 08-04315 | Organic Compounds (OC) emissions from this emissions unit shall not exceed 0.65 lb/hr, 0.15 ton/month, and 1.76 tons per year (TPY).<br><br>The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D) and OAC 3745-21-07 (G)(6)(a). |
| b. | OAC rule 3745-31-05(D)<br>(Synthetic minor to avoid TV) | The emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112 (b) of Title III of the Clean Air Act, from this facility shall be less than 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs, based on rolling, 12-month summations.<br><br>See c)(1). |
| c. | OAC rule 3745-17-07(A)(1) | Visible particulate emissions (PE) from the stack serving this emissions unit shall |

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | | not exceed 20 percent opacity as a six-minute average, except as provided by rule. |
| d. | OAC rule 3745-21-07(M)(4) | See b)(2)b. |
| e. | OAC rule 3745-21-07(G)(1) effective 6/15/1999 | The requirements specified by this rule are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3).<br><br>See b)(2)c. |

(2) Additional Terms and Conditions

a. The hourly OC emission limitation was established to reflect the controlled potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.

b. This emissions unit shall be equipped with a control system (i.e., capture and control equipment) that reduces the organic compound emissions by an overall control efficiency of at least eighty-five percent by weight. If the reductions are achieved by incineration, ninety percent or more of the carbon in the organic material being incinerated shall be oxidized to carbon dioxide.

c. On February 18, 2008, OAC rule 3745-21-07 was partially revised; therefore, the 21-07(G)(1) rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07(G)(1) rule provisions still exists as part of the federally-approved SIP for Ohio. The following terms and conditions shall become void after U.S. EPA approves the rule revision: b)(1)e.

d. All of the OC emissions from this emissions unit shall be vented to the thermal oxidizer that shall meet the operational, monitoring, and record keeping requirements of this permit, when the emissions unit is in operation. The thermal oxidizer is a common OC control device for emissions units P047, P048, P049 and P050.

c) Operational Restrictions

(1) The maximum paper usage rate for this emissions unit shall not exceed 228,083 lbs/month or 2,737,000 lbs/year, based on rolling, 12-month summations.

d) Monitoring and/or Recordkeeping Requirements

(1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average combustion temperature within the thermal oxidizer,

for any 3-hour block of time when the emissions unit(s) controlled by the thermal oxidizer is/are in operation, shall not be more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance.

(2) The permittee shall properly install, operate, and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the thermal oxidizer when the emissions unit(s) is/are in operation, including periods of startup and shutdown. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within ± 1 percent of the temperature being measured or ± 5 degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals, with any modifications deemed necessary by the permittee. The permittee shall collect and record the following information each day the emissions unit(s) is/are in operation:

a. all 3-hour blocks of time, when the emissions unit(s) controlled by the thermal oxidizer was/were in operation, during which the average combustion temperature within the thermal oxidizer was more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance; and

b. a log or record of the operating time for the capture (collection) system, thermal oxidizer, monitoring equipment, and the associated emissions unit(s).

These records shall be maintained at the facility for a period of three years.

(3) Whenever the monitored average combustion temperature within the thermal oxidizer deviates from the range or limit established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;

b. the magnitude of the deviation at that time;

c. the date the investigation was conducted;

d. the name(s) of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range/limit specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

a. a description of the corrective action;

b. the date corrective action was completed;

c. the date and time the deviation ended;

d. the total period of time (in minutes) during which there was a deviation;

e. the temperature readings immediately after the corrective action was implemented; and

f. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The temperature range/limit is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted temperature range/limit based upon information obtained during future performance tests that demonstrate compliance with the allowable emission rate(s) for the controlled pollutant(s). In addition, approved revisions to the temperature range/limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

(4) The permittee shall collect and record the following information each month for this emissions unit:

a. The total pounds of paper cured.

b. The total organic compound emission rate, in pounds (see f)(1)b.v. for the calculation methodology).

c. The total formaldehyde emission rate, in pounds (see f)(1)b.i. for the calculation methodology).

d. The total phenol emission rate, in pounds (see f)(1)b.ii. for the calculation methodology).

e. The total methanol emission rate, in pounds (see f)(1)b.iii. for the calculation methodology).

f. The total phenol, formaldehyde, methanol, and total combined HAPs emission rates, in tons.

g. The rolling, 12-month summation of the phenol, formaldehyde, methanol, and total combined HAPs.

h. The rolling, 12-month summation of the pounds of paper cured in this emissions unit.

(5) The permittee shall collect and record the following information each month for the entire facility:

a. The total individual Hazardous Air Pollutant (HAP)* emission rate, in tons per month, for each HAP employed at this facility.

b. The rolling, 12-month summation of the total individual HAP emissions from all emissions units at the facility, in tons.

c. The total combined HAP emission rate, in tons per month, for all of the HAPs employed at this facility.

d. The rolling, 12-month summation of the total combined HAP emissions from all emissions units at the facility, in tons.

*A listing of the HAPs can be found in Section 112 (b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office or local agency contact. This information does not have to be kept on a line-by-line basis.

(6) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

i. each period of time (start time and date, and end time and date) when the average combustion temperature within the thermal oxidizer was outside of the acceptable range;

ii. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the thermal oxidizer;

iii. all exceedances of the rolling, 12-month individual HAP emission limitation;

iv. all exceedances of the rolling, 12-month total combined HAP emission limitation;

v. all exceedances of the maximum monthly paper production rate of 228,083 pounds of paper per month; and

vi. all exceedances of the rolling, 12-month annual paper production rate of 2,737,000 pounds of paper per year.

b. the probable cause of each deviation (excursion);

c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and

d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

(2) The permittee shall identify in the annual permit evaluation report the following information concerning the operations of the thermal oxidizer during the 12-month reporting period for this/these emissions unit(s):

a. each period of time (start time and date, and end time and date) when the average combustion temperature within the thermal oxidizer was outside of the acceptable range;

b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the thermal oxidizer;

c. each incident of deviation described in e)(2)a. or e)(2)b. where a prompt investigation was not conducted;

d. each incident of deviation described in e)(2)a. or e)(2)b. where prompt corrective action, that would bring the emissions unit(s) into compliance and/or the temperature within the thermal oxidizer into compliance with the acceptable range, was determined to be necessary and was not taken; and

e. each incident of deviation described in e)(2)a. or e)(2)b. where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

(3) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d)(6) above:

a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and

b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

(4) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

(1) Compliance with the emission limitation(s) in b)(1) of these terms and conditions shall be determined in accordance with the following method(s):

a. <u>Emission Limitation</u>

The OC emissions from this emissions unit shall not exceed 0.65 lb/hour.

<u>Applicable Compliance Method</u>

Compliance with this emissions limitation shall be based upon the following:

i. Multiply the maximum paper usage of 500 lbs/hr by the emission factor of 1.35 x 10-4 lb formaldehyde/lb paper, as derived from the December, 1999 stack test.

ii. Multiply the maximum paper usage of 500 lbs/hr by the emission factor of 2.865 x 10-4 lb phenol/lb paper, as derived from the December, 1999 stack test.

iii. Multiply the maximum paper usage of 500 lbs/hr by the emission factor of 6.975 x 10-4 lb methanol/lb paper, as derived from the December, 1999 stack test.

iv. Multiply the maximum paper usage of 500 lbs/hr by the emission factor of 1.75 x 10-4 lb isopropanol/lb paper, as derived from the December, 1999 stack test.

v. Sum the products from i. through iv. for the total hourly OC emission rate in pounds.

If required, compliance shall be based upon stack testing performed in accordance with USEPA Reference Method 18 or 25.

b. Emission Limitation

The OC emissions from this emissions unit shall not exceed 0.15 tons per month.

Applicable Compliance Method

i. Multiply the paper usage, in lbs/month as determined in d)(4)a. by the emission factor of 1.35 x 10-4 lb formaldehyde/lb paper, as derived from the December, 1999 stack test.

ii. Multiply the paper usage, in lbs/month as determined in d)(4)a. by the emission factor of 2.865 x 10-4 lb phenol/lb paper, as derived from the December, 1999 stack test.

iii. Multiply the paper usage, in lbs/month as determined in d)(4)a. by the emission factor of 6.975 x 10-4 lb methanol/lb paper, as derived from the December, 1999 stack test.

iv. Multiply the paper usage, in lbs/month as determined in d)(4)a. by the emission factor of 1.75 x 10-4 lb isopropanol/lb paper, as derived from the December, 1999 stack test.

v. Sum the products from f)(1)b.i. through f)(1)b.iv., in lbs OC/month, for each month and divide by 2000 lbs/ton.

c. Emission Limitation

OC emissions from this emissions unit shall not exceed 1.76 TPY.

Applicable Compliance Method

Compliance with this emissions limitation shall be based upon record keeping in d)(4)a. and shall be the sum of the 12-monthly limits, in lbs, divided by 2000 lbs/ton.

d. Emission Limitation

The maximum paper usage for this emissions unit shall not exceed 2,737,000 lbs/year per year, based upon a rolling, 12-month summation.

Applicable Compliance Method

Compliance shall be based upon the record keeping specified in d)(4).

e. Emission Limitation

The emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112 (b) of Title III of the Clean Air Act, from this facility shall be less than 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs, per rolling, 12-month summation.

Applicable Compliance Method

Compliance shall be based upon the monthly record keeping as specified in d)(5) of this permit.

f. Emission Limitation

Visible particulate emissions from any/the stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method

Compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9.

(2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted within one year of permit issuance.

b. The emission testing shall be conducted to demonstrate compliance with the OC emissions rate and the 90% control efficiency limitation specified in OAC rule 3745-21-07(M)(4).

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Method 18 of 40 CFR Part 60, Appendix A, as well as Method 25 or 25 A of 40 CFR Part 60, Appendix A, as appropriate, and the test method(s) which must be employed to demonstrate compliance with the overall control efficiency limitation for organic compounds.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)

The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in 3745-21-10 or an alternative test protocol approved by the Ohio EPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

e. Not later than 60 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

g) Miscellaneous Requirements

(1) None.

**4. P050, #4 Paper Curing Oven - West**

**Operations, Property and/or Equipment Description:**

300 lbs/hr Paper Curing Oven with Regenerative Thermal Oxidizer

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)b., c)(1), d)(4) and d)(5), e)(1), f)(1)e.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| a. | OAC rule 3745-31-05(A)(3)<br>PTI 08-04315 | Organic Compounds (OC) emissions from this emissions unit shall not exceed 0.39 lb/hr, 0.09 ton/month, and 1.06 tons per year (TPY).<br><br>The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D) and OAC 3745-21-07 (G)(6)(a). |
| b. | OAC rule 3745-31-05(D)<br>(Synthetic minor to avoid TV) | The emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112 (b) of Title III of the Clean Air Act, from this facility shall be less than 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs, based on rolling, 12-month summations.<br><br>See c)(1). |
| | OAC rule 3745-17-07(A)(1) | Visible particulate emissions (PE) from the stack serving this emissions unit shall |

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | | not exceed 20 percent opacity as a six-minute average, except as provided by rule. |
| | OAC rule 3745-21-07(M)(4) | See b)(2)b. |
| | OAC rule 3745-21-07(G)(1) effective 6/15/1999 | The requirements specified by this rule are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3).<br><br>See b)(2)c. |

(2) Additional Terms and Conditions

a. The hourly OC emission limitation was established to reflect the controlled potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.

b. This emissions unit shall be equipped with a control system (i.e., capture and control equipment) that reduces the organic compound emissions by an overall control efficiency of at least eighty-five percent by weight. If the reductions are achieved by incineration, ninety percent or more of the carbon in the organic material being incinerated shall be oxidized to carbon dioxide.

c. On February 18, 2008, OAC rule 3745-21-07 was partially revised; therefore, the 21-07(G)(1) rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07(G)(1) rule provisions still exists as part of the federally-approved SIP for Ohio. The following terms and conditions shall become void after U.S. EPA approves the rule revision: b)(1)e.

d. All of the OC emissions from this emissions unit shall be vented to the thermal oxidizer that shall meet the operational, monitoring, and record keeping requirements of this permit, when the emissions unit is in operation. The thermal oxidizer is a common OC control device for emissions units P047, P048, P049 and P050.

c) Operational Restrictions

(1) The maximum paper usage rate for this emissions unit shall not exceed 136,875 lbs/month or 1,642,500 lbs/year, based on rolling, 12-month summations.

d) Monitoring and/or Recordkeeping Requirements

(1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average combustion temperature within the thermal oxidizer,

for any 3-hour block of time when the emissions unit(s) controlled by the thermal oxidizer is/are in operation, shall not be more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance.

(2) The permittee shall properly install, operate, and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the thermal oxidizer when the emissions unit(s) is/are in operation, including periods of startup and shutdown. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within ± 1 percent of the temperature being measured or ± 5 degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals, with any modifications deemed necessary by the permittee. The permittee shall collect and record the following information each day the emissions unit(s) is/are in operation:

a. all 3-hour blocks of time, when the emissions unit(s) controlled by the thermal oxidizer was/were in operation, during which the average combustion temperature within the thermal oxidizer was more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance; and

b. a log or record of the operating time for the capture (collection) system, thermal oxidizer, monitoring equipment, and the associated emissions unit(s).

These records shall be maintained at the facility for a period of three years.

(3) Whenever the monitored average combustion temperature within the thermal oxidizer deviates from the range or limit established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;

b. the magnitude of the deviation at that time;

c. the date the investigation was conducted;

d. the name(s) of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range/limit specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

a. a description of the corrective action;

b. the date corrective action was completed;

c. the date and time the deviation ended;

d. the total period of time (in minutes) during which there was a deviation;

e. the temperature readings immediately after the corrective action was implemented; and

f. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The temperature range/limit is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted temperature range/limit based upon information obtained during future performance tests that demonstrate compliance with the allowable emission rate(s) for the controlled pollutant(s). In addition, approved revisions to the temperature range/limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

(4) The permittee shall collect and record the following information each month for this emissions unit:

a. The total pounds of paper cured.

b. The total organic compound emission rate, in pounds (see f)(1)b.v. for the calculation methodology).

c. The total formaldehyde emission rate, in pounds (see f)(1)b.i. for the calculation methodology).

d. The total phenol emission rate, in pounds (see f)(1)b.ii. for the calculation methodology).

e. The total methanol emission rate, in pounds (see f)(1)b.iii. for the calculation methodology).

f. The total phenol, formaldehyde, methanol, and total combined HAPs emission rates, in tons.

g. The rolling, 12-month summation of the phenol, formaldehyde, methanol, and total combined HAPs.

h. The rolling, 12-month summation of the pounds of paper cured in this emissions unit.

(5) The permittee shall collect and record the following information each month for the entire facility:

a. The total individual Hazardous Air Pollutant (HAP)* emission rate, in tons per month, for each HAP employed at this facility.

b. The rolling, 12-month summation of the total individual HAP emissions from all emissions units at the facility, in tons.

c. The total combined HAP emission rate, in tons per month, for all of the HAPs employed at this facility.

d. The rolling, 12-month summation of the total combined HAP emissions from all emissions units at the facility, in tons.

*A listing of the HAPs can be found in Section 112 (b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office or local agency contact. This information does not have to be kept on a line-by-line basis.

(6) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

i. each period of time (start time and date, and end time and date) when the average combustion temperature within the thermal oxidizer was outside of the acceptable range;

ii. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the thermal oxidizer;

iii. all exceedances of the rolling, 12-month individual HAP emission limitation;

iv. all exceedances of the rolling, 12-month total combined HAP emission limitation;

v. all exceedances of the maximum monthly paper production rate of 136,875 pounds of paper per month; and

vi. all exceedances of the rolling, 12-month annual paper production rate of 1,642,500 pounds of paper per year.

b. the probable cause of each deviation (excursion);

c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and

d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

(2) The permittee shall identify in the annual permit evaluation report the following information concerning the operations of the thermal oxidizer during the 12-month reporting period for this/these emissions unit(s):

a. each period of time (start time and date, and end time and date) when the average combustion temperature within the thermal oxidizer was outside of the acceptable range;

b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the thermal oxidizer;

c. each incident of deviation described in e)(2)a. or e)(2)b. where a prompt investigation was not conducted;

d. each incident of deviation described in e)(2)a. or e)(2)b. where prompt corrective action, that would bring the emissions unit(s) into compliance and/or the temperature within the thermal oxidizer into compliance with the acceptable range, was determined to be necessary and was not taken; and

e. each incident of deviation described in e)(2)a. or e)(2)b. where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

(3) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d)(6) above:

a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and

b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

(4) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

(1) Compliance with the emission limitation(s) in b)(1) of these terms and conditions shall be determined in accordance with the following method(s):

a. <u>Emission Limitation</u>

The OC emissions from this emissions unit shall not exceed 0.39 lb/hour.

<u>Applicable Compliance Method</u>

Compliance with this emissions limitation shall be based upon the following:

i. Multiply the maximum paper usage of 300 lbs/hr by the emission factor of 1.35 x 10-4 lb formaldehyde/lb paper, as derived from the December, 1999 stack test.

ii. Multiply the maximum paper usage of 300 lbs/hr by the emission factor of 2.865 x 10-4 lb phenol/lb paper, as derived from the December, 1999 stack test.

iii. Multiply the maximum paper usage of 300 lbs/hr by the emission factor of 6.975 x 10-4 lb methanol/lb paper, as derived from the December, 1999 stack test.

iv. Multiply the maximum paper usage of 300 lbs/hr by the emission factor of 1.75 x 10-4 lb isopropanol/lb paper, as derived from the December, 1999 stack test.

v. Sum the products from i. through iv. for the total hourly OC emission rate in pounds.

If required, compliance shall be based upon stack testing performed in accordance with USEPA Reference Method 18 or 25.

b. Emission Limitation

The OC emissions from this emissions unit shall not exceed 0.09 tons per month.

Applicable Compliance Method

i. Multiply the paper usage, in lbs/month as determined in d)(4)a. by the emission factor of 1.35 x 10-4 lb formaldehyde/lb paper, as derived from the December, 1999 stack test.

ii. Multiply the paper usage, in lbs/month as determined in d)(4)a. by the emission factor of 2.865 x 10-4 lb phenol/lb paper, as derived from the December, 1999 stack test.

iii. Multiply the paper usage, in lbs/month as determined in d)(4)a. by the emission factor of 6.975 x 10-4 lb methanol/lb paper, as derived from the December, 1999 stack test.

iv. Multiply the paper usage, in lbs/month as determined in d)(4)a. by the emission factor of 1.75 x 10-4 lb isopropanol/lb paper, as derived from the December, 1999 stack test.

v. Sum the products from f)(1)b.i. through f)(1)b.iv., in lbs OC/month, for each month and divide by 2000 lbs/ton.

c. Emission Limitation

OC emissions from this emissions unit shall not exceed 1.06 TPY.

Applicable Compliance Method

Compliance with this emissions limitation shall be based upon record keeping in d)(4) and shall be the sum of the 12-monthly limits, in lbs, divided by 2000 lbs/ton.

d. Emission Limitation

The maximum paper usage for this emissions unit shall not exceed 1,642,500 lbs/year per year, based upon a rolling, 12-month summation.

Applicable Compliance Method

Compliance shall be based upon the record keeping specified in d)(4).

e. Emission Limitation

The emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112 (b) of Title III of the Clean Air Act, from this facility shall be less than 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs, per rolling, 12-month summation.

Applicable Compliance Method

Compliance shall be based upon the monthly record keeping as specified in d)(5) of this permit.

f. Emission Limitation

Visible particulate emissions from any/the stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method

Compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9.

(2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted within one year of permit issuance.

b. The emission testing shall be conducted to demonstrate compliance with the OC emissions rate and the 90% control efficiency limitation specified in OAC rule 3745-21-07(M)(4).

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Method 18 of 40 CFR Part 60, Appendix A, as well as Method 25 or 25 A of 40 CFR Part 60, Appendix A, as appropriate, and the test method(s) which must be employed to demonstrate compliance with the overall control efficiency limitation for organic compounds.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)

The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in 3745-21-10 or an alternative test protocol approved by the Ohio EPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

e. Not later than 60 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

g) Miscellaneous Requirements

(1) None.